

CLAIMS

1. A method for supporting multiple diagnostic sessions in a bi-directional communication device, said method comprising:
receiving diagnostic session requests from a plurality of requesters (110, 130);
5 verifying identification information for each of said requesters (110, 130);
establishing a communications channel for each verified requester; and
communicating the requested information to all of said verified requesters via
said established communications channels.
- 10 2. The method of claim 1, further comprising:
if communication of information to a requester (110, 130) fails, making
available, to a subsequent requester, the communications channel associated with
the failed communication.
- 15 3. The method of claim 1, wherein said identification information
comprises a user ID and a password.
4. The method of claim 1, wherein said establishing a communications
channel comprises assigning an available socket for communication with each
20 verified requester.
5. The method of claim 4, further comprising rejecting subsequent
requests after a total number of available sockets has been assigned.
- 25 6. The method of claim 1, wherein said establishing a communications
channel further comprises saving session information such as, a requester IP
address and a requester receiving port number for each of said verified requesters.
- 30 7. The method of claim 6, wherein the requested information is
communicated to each of said verified requesters via an available socket comprising
the respective saved session information.

11.

8. An apparatus (120) for supporting multiple diagnostic sessions in a bi-directional communication device, said apparatus comprising:

a server (190);

5 a memory (220) for storing program instructions; and

a processor (210) for executing said instructions to configure the apparatus

(120) to perform the steps of:

receiving diagnostic session requests from a plurality of requesters (110, 130);

verifying identification information for each of said requesters (110, 130);

10 establishing a communications channel for each verified requester; and

communicating the requested information to all of said verified requesters via said established communications channels.

9. The apparatus (120) of claim 8, further configured to perform the step

15 of:

if communication of information to a requester (110, 130) fails, making available, to a subsequent requester, the communications channel associated with the failed communication.

10. The apparatus (120) of claim 8, further configured to perform the steps

20 of:

rejecting subsequent requests after a total number of available sockets has been assigned.

11. The apparatus (120) of claim 8, wherein said establishing a communications channel comprises assigning an available socket for communication with each verified requester.

12. The apparatus (120) of claim 11, wherein said assigned sockets
30 comprise a requester IP address and a requester receiving port number.

13. The apparatus (120) of claim 8, wherein said plurality of requesters (110, 130) comprise Telnet clients (170, 180).

14. The apparatus (120) of claim 8, wherein said plurality of requesters (110, 130) are network devices.

15. The apparatus (120) of claim 8, wherein said server (190) comprises:
a web server (222) for enabling communication between a requesting device
and a diagnostic engine; and
said diagnostic engine (224) for performing the routines that are specified in
each of said requests.

16. The apparatus (120) of claim 8, wherein said apparatus comprises a modem.

17. An apparatus (120) for supporting multiple Telnet sessions, comprising:
means (222) for receiving Telnet session requests from a plurality of
requesters (110, 130);
means (224) for verifying identification information for each of said requesters;
means (224) for establishing a communications channel for each verified
requester; and
means (222) for communicating the requested information to all of said verified
requesters via said established communications channels.

18. Computer-readable medium for storing a set of instructions, wherein when said set of instructions is executed by a processor perform a method comprising:

5 receiving Telnet session requests from a plurality of requesters;
verifying identification information for each of said requesters;
establishing a communications channel for each verified requester; and
communicating the requested information to all of said verified requesters via
said established communications channels.

10 19. A network (100) comprising:

at least one subscriber terminal (110) comprising a Telnet client (170) for
initiating Telnet session requests;

at least one data servicing system (130) comprising a Telnet client (180) for
initiating Telnet session requests; and

15 a network device (120) comprising:

a Telnet server (190);

a memory (220) for storing program instructions; and

a processor (210) for executing said instructions to configure said

network device (120) to perform the steps of:

20 receiving Telnet session requests from said at least one subscriber
terminal and said at least one data servicing system;

verifying identification information for each of said requesters;

establishing a communications channel for each verified requester; and

communicating the requested information to all of said verified

25 requesters via said established communications channels.

20. The network (100) of claim 19, wherein said network device (120) is
further configured to perform the step of:

30 if communication of information to a requester (110, 130) fails, making
available, to a subsequent requester, the communications channel associated with
the failed communication.